

Section V

SMALL BUSINESS LENDING

STUDY PURPOSES

This study is intended to provide a quantitative and qualitative evaluation of bank Small Business Lending patterns in San Diego County. Definitions used in this study are consistent with the current CRA (Community Reinvestment Act) regulations, which provide a backdrop for current and future evaluations. In this respect, this study will be substantially different from previous studies conducted in this area.¹ First, “small business-loans” defined under the current CRA regulation are defined as loans of \$1 million or less and small businesses are defined, based on annual sales of \$1 million or less. In previous studies, small businesses were defined as business as with annual sales between \$50,000 and \$5 million² and loan estimates exceeded the current scope of the CRA regulatory definitions. Because CRA is a geographic based and referenced Federal regulation, all data used in this study were analyzed using GIS (Geographic Information Systems) technology and referred to in aggregation to the low-, moderate-, middle- and high-income defined census tracts in the County. These definitions were based on current CRA regulations and are different from previous studies. Generally, federal regulators examine low- and moderate-income defined tracts separately and therefore data in this study presents these income groups separately.

This study is very unique in that it collected small business-loan data from banks with deposit gathering offices in San Diego. This included data from large banks and small banks.³ These data were combined with CRA reported small business-loan data to form the foundation of the analysis. Moreover, because this study utilized GIS technology it was able to create and test several unique variables which could not have been analyzed with more traditional methods of analysis. Specifically, the study integrated the bank branching data, which was point data, to census tract level data, polygon data, creating two unique and never before studied variables measuring branch density and service areas based on the

¹ Community Credit Needs Assessment – City of San Diego, 1992, David Paul Rosen & Associates.

² Page S-2.

³ Large Banks are defined, under CRA, as institutions with assets of \$250 million or more.

proximity of bank branches to a census tract. In addition, it was able to demonstrate the value of using land use data in assessing the small business-loan distribution among low income defined census tracts.

The information contained in this section is designed to be used with the Business Credit Needs Assessment survey, which is defining the credit needs of small businesses throughout the County.

The Small Business Lending section is comprised of two parts:

1. Small Business Loan Distributions by Low-, Moderate-, Middle- and High-income defined tracts.
2. Small Business Loan Predictive Model based on market area characteristics.

KEY FINDINGS

1. Low-income defined census tracts, which represent 5.4 percent of all tracts within the County, received 4.21 and 3.32 percent of the total small business-loans in 1997 and 1998, respectively. High-income defined tracts, which represent 26.29 percent of the tracts in the County, received 35.8 and 32.2 percent of the total small business-loans in 1997 and 1998, respectively.
2. Low-income defined tracts received \$1,237,000 per 100 businesses while high-income defined tracts received \$2,470,000 per 100 businesses in 1998.
3. Low- and moderate-income defined tracts, combined, have more businesses per tract than middle- and high-income defined tracts. Low- and moderate-income defined tracts receive 22.73 loans per 100 businesses while middle- and high-income defined tracts receive 33.72 loans per 100 businesses.
4. Low- and moderate-income defined tracts had a 15 percent decline in the total number of bank branches from 1991-1998. High-income defined tracts had a 3 percent decline and middle-income tracts had a 1.7- percent decline.
5. Total small business-loans originating in low-income tracts declined 25 percent from 1997 to 1998. High-income defined tracts declined 8.5 percent.
6. It is estimated that there may be as much as \$90 million in annual small business-loan potential unmet in low- and moderate-income defined tracts.

FFIEC – LARGE BANK LENDING SUMMARY

- In 1998 the Federal Financial Institutions Examination Council (FFIEC)⁴ reported that 144 institutions had made 25,828 small business-loans made in San Diego County for \$1,273,071,000. This was 24 more loans than in 1997 (or 0.1 percent) and approximately \$142 million more in total dollar commitment (or 11.2 percent).⁵
- 1998 saw a 25 percent increase in the number of loans to small business from 9,789 in 1997 to 12,250 in 1998.

The top five large bank lenders, reported by the FFIEC, in 1997 and 1998 are shown in the following table:

Table V - I						
San Diego City County Small Business Lending Study						
Large Financial Institution Lending 1997 to 1998						
Loan Dollars in Thousands (\$000)						
Institution	Number Small Business Loans	Dollar Small Business Loans	Ranking 1997	Number Small Business Loans	Dollar Small Business Loans	Ranking 1998
	1997			1998		
Wells Fargo Bank	7,943	\$233,877	1	4,481	\$153,203	1
American Express	3,092	\$36,502	4	3,931	\$30,865	2
Bank of America	3,126	\$116,725	3	3,319	\$124,155	3
Mountainwest Financial Corp.	4,008	\$10,038	2	3,237	\$8,633	4
Union Bank	1,609	\$256,191	5	2,820	\$272,721	5

⁴ The FFIEC collects and reports on lending by all institutions with \$250 million in assets or more. These institutions are called large financial institutions in the CRA regulation. Small Business - Loans are loans of \$1 million or less, made for business purpose regardless of the size of the business. Loans to small businesses are loans of \$1 million or less to businesses with annual gross revenues of \$1 million or less. These definitions are provided by the CRA regulation.

⁵ FFIEC 1998 Small Business lending data included 323 loans for which no census tracts were reported. These represent 1.3 percent of the total FFIEC reported loans for the County. Census tract and income aggregation of data presented in this report does not include these 323 loans.

- The dynamics of lending are complex and are not bound by geographic barriers. Interestingly, **two of the top five lenders for small business-loans, reported in the FFIEC data for San Diego, are non-traditional institutions with no branches in this County.** Moreover, some of the institutions with larger branch networks are not ranked in the top five small business-loan lenders, specifically Washington Mutual and California Federal/Glendale Federal.
- Based on the 1998 FFIEC CRA small business-loan data, only 20 of the 141 institutions reported by the FFIEC have deposit-taking offices in the County.

The 1998 FFIEC small business-loan distribution by census tract is highlighted in Exhibit V-1. The FFIEC data was unable to supply census tract identifications for 323 small business-loans in its 1998 data release. As we examine the census tract distribution of loans and the aggregation of loans into low-, moderate-, middle- and high-income defined groups, these loans will not be included in our totals. The map, Exhibit V-1 is based on the number of verifiable small business-loans by census tract. As will be shown later, those tracts with the highest numbers and dollar commitments, are highly correlated to the number of companies that employee between 11 and 50 employees. These types of companies are highly correlated to the concentration of manufacturing and wholesale industry sites or businesses in the tract.

TOTAL SMALL BUSINESS-LOANS FOR ALL BANKS

Small Business-Loans

As part of this study, the research team collected loan data from individual financial institutions with deposit taking offices in San Diego County. The team did not collect data from institutions that were identified as not providing small business-loans. Of the 61 total FDIC Insured institutions in San Diego County, data was solicited from 49 with 31 financial institutions submitting loan data for the research project. This represented 63 percent of the deposit gathering institutions in the County. Based on those that responded, the data accounted for **98 percent** of the FFIEC 1998 Total Small Business-Loans generated by banks with offices in San Diego.

The collection of this data allowed the GIS (Geographic Information Systems) analysis to examine a more accurate figure for “Total Small Business-Loans”, because many of the institutions that supplied loan data were smaller institutions who are not required to submit loan data to the FFIEC. In

Exhibit V-1

addition, the study was able to examine the relationship between locally headquartered institutions versus statewide institutions. **The result was an additional 1,898 loans representing an additional \$283,345,000 in loan commitments for 1998.**

Table V - 1A 1997 vs 1998 Lending Census Tract Summary Loan Dollars in Thousands (\$000)		
	Number	Dollar
1997 FFIEC Loans	25,804	\$1,130,326
1997 FFIEC Loans to Small Businesses	9,745	\$390,231
1997 Total Loans - All Banks	29,229	\$1,641,573
1998 FFIEC Loans	25,505	\$1,265,003
1998 FFIEC Loans to Small Businesses	12,472	\$481,508
1998 Total Loans - All Banks	27,726	\$1,556,416

1997 versus 1998 FFIEC Reported Loans

The following table summarizes the FFIEC and Total Small Business-Loan distribution by tract for San Diego County.

- **Total FFIEC reported loans to small businesses increased 28 percent from 1997 to 1998**
- **Total small business-loans for all institutions declined from 1997 to 1998 by approximately 5 percent. This may be related to the decline of small banks within in the County between 1997 and 1998.**

The geographic distribution of total small business-loans (all banks) is summarized in the following Exhibit V-2, which shows the distribution of loans by census tract.

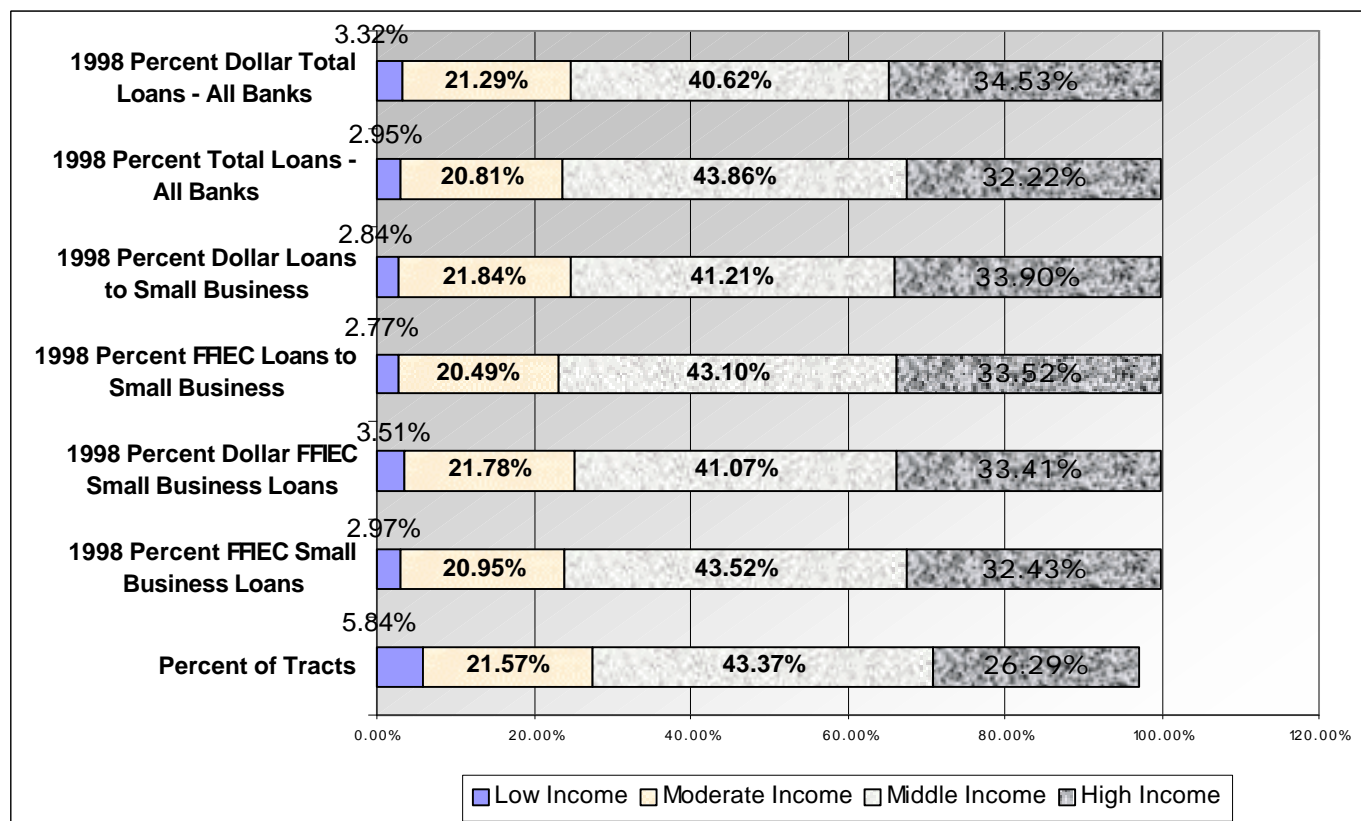
- **3.32 percent of the 1998 Total Small Business-Loan dollars, originated within low-income defined census tracts. Low-income tracts represent 4.6 percent of the total businesses in San Diego County.**

Exhibit V-2

1998 Small Business-Loan Distribution by Income Classification of Tracts

The percent distribution of 1998 Small Business-Loans is summarized by the income classification⁶ of the census tracts, in the following graph.

Figure 5-1 — Small Business-Loans Distribution by Income Classification of Tracts



Tables V-2A and V-2B detail the numbers and dollars of small business-loans by the income classification of the census tracts.

The following maps, Exhibit V-4A – 4B, summarizes the distribution of 1998 Total Small Business-Loans for all banks, by the income classification of the census tract.

⁶ The following guidelines were used to define the income categories used in this geographic analysis. These categories are based on FFIEC (Federal Financial Institutions Examination Council) guidelines, issued in November 1995², outlining the new CRA regulation, which went into effect in January 1996. In this analysis median family income classification is based on the 1990 median family income reported in the 1990 US Census. Map Exhibit V-3 highlights the income classification of tracts within San Diego County. The 1990 median family income was \$39,798. Low income tracts are defined as less than 50% of the median family income, moderate income is 50 to less than 80 percent, middle is 80 to less than 120 percent and high is 120 percent or more.

Tables V-2A and V-2B (1 pg)

Exhibit V-3

Exhibit V-4A

Exhibit V-4B

1997 Small Business-Loan Distribution

The following table summarizes the **1997** Small Business-Loan distribution, by the income classification of the census tracts.

Table V - 3 A						
1997 Percent Bank Lending by Income Classification of Tracts						
	Low Income	Moderate Income	Middle Income	High Income	Not Reported	Grand Total
Percent of Tracts	5.84%	21.57%	43.37%	26.29%	2.92%	100.00%
Percent FFIEC Small Business Loans	3.28%	20.24%	42.84%	33.44%	0.20%	100.00%
Percent Dollar FFIEC Small Business Loans	3.89%	21.47%	39.85%	34.49%	0.30%	100.00%
Percent Total Small Business Loans - All Banks	3.26%	20.09%	42.96%	33.49%	0.20%	100.00%
Percent Total Dollars Small Business Loans - All Banks	4.21%	20.94%	38.79%	35.80%	0.26%	100.00%

Table V-3 B details the numbers and dollars of small business-loans by the income classification of the census tracts.

1998-97 Key Rates and Ratios by Income Classification of Tracts

- In 1997 and 1998, low-income census tracts received fewer numbers of loans and fewer loan dollars when compared to high-income tracts. The following table highlights the 1998 Small Business-Loans.

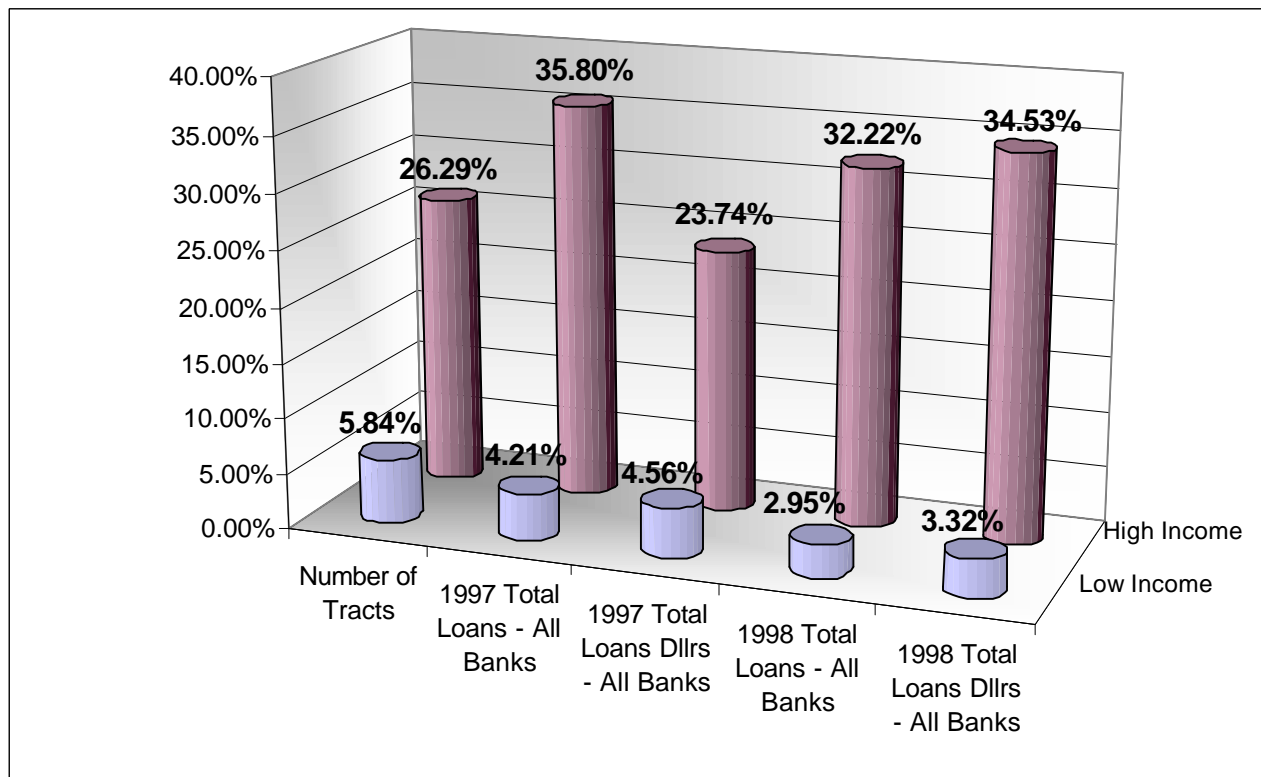
Table V - 4						
1998 Rate of Lending by Income Classification of Tracts						
Loan Dollars in Thousands (\$000)						
	Low Income	Moderate Income	Middle Income	High Income	Not Reported	Total
Average Loan Dollars per Tract	\$1,990	\$3,451	\$3,276	\$4,594	\$279	\$3,498
Average Number Loans per Tract	31	60	63	76	3	62
Number of Loans per 100 Businesses	19.52	23.27	29.82	41.04	30.28	30.24
Dollar Loans per 100 Businesses	\$1,237	\$1,336	\$1,550	\$2,470	\$2,551	\$1,698
Number of Loans Rate per branch Serving Area	0.79	1.84	2.09	2.53	0.09	1.99

Table V-3B

The following graph highlights the proportion of lending to low-income tracts in 1997 versus 1998.

- **Low-income tracts represent 5.64 percent of the total number of tracts. They received 4.21 and 3.32 percent of the total small business-loan dollars in 1997 and 1998, respectively. High-income tracts represent 26.29 percent of the total tracts and they received 35.8 and 32.2 percent of the total loans in 1997 and 1998 respectively.**
- **Total small business-loans in low-income tracts declined 25 percent from 1997 to 1998, while high-income defined tract declined only 8.5 percent.**

Figure 5-2 — Small Business-Loans by High- vs Low-Income Tracts



The following tables compare the 1997 versus 1998 total small business lending by the income classification of the census tracts.

Table V - 5 1997 and 1998 Total Loan Distribution Loan Dollars in Thousands (\$000)						
	Low Income	Moderate Income	Middle Income	High Income	Not Reported	Grand Total
Number of Tracts	26	96	193	117	13	445
1997 Total Loans - All Banks	952	5872	12557	9790	58	29229
1997 Total Loans Dlrs - All Banks	\$69,097	\$343,810	\$636,729	\$587,659	\$4,278	\$1,641,573
1998 Total Loans - All Banks	817	5771	12162	8933	43	27726
1998 Total Loans Dlrs - All Banks	\$51,749	\$331,322	\$632,229	\$537,493	\$3,623	\$1,556,416

Table V - 6 1997 and 1998 Total Loan Distribution						
	Low Income	Moderate Income	Middle Income	High Income	Not Reported	Grand Total
Number of Tracts	5.84%	21.57%	43.37%	26.29%	2.92%	100.00%
1997 Total Loans - All Banks	4.21%	20.94%	38.79%	35.80%	0.26%	100.00%
1997 Total Loans Dlrs - All Banks	4.56%	27.05%	44.49%	23.74%	0.15%	100.00%
1998 Total Loans - All Banks	2.95%	20.81%	43.86%	32.22%	0.16%	100.00%
1998 Total Loans Dlrs - All Banks	3.32%	21.29%	40.62%	34.53%	0.23%	100.00%

- **Low-income defined census tracts had the largest decline in rate of loan dollars per 100 businesses.**
- **Loan dollars per 100 businesses in low-income census tracts was almost ½ that of high-income census tracts in 1998.**

As mentioned earlier, the rate of lending for low-income defined tracts has consistently been lower than the rate for high-income defined tracts. The following table summarizes the differences between 1997 and 1998 lending rates by income classification of the census tracts.

Table V - 7 1997 versus 1998 Total Loan Rate per 100 Businesses Loan Dollars in Thousands (\$000)						
	Low Income	Moderate Income	Middle Income	High Income	Not Reported	Grand Total
1997 rate of LN Dlrs per 100 bus.	\$1,651	\$1,386	\$1,561	\$2,700	\$3,013	\$1,791
1998 rate of LN Dlrs per 100 bus.	\$1,237	\$1,336	\$1,550	\$2,470	\$2,551	\$1,698
PCT Change 98- 97	-0.25	-0.04	-0.01	-0.09	-0.15	-0.05

The rate of loan dollars per 100 businesses is summarized in the following two maps, Exhibits V-5A & V-5B.

Lendable Census Tracts

- Not all low-income tracts will be lendable tracts for small business-loans.
- Within low-income defined tracts, 11 of the total 26 tracts have less than 10 percent.

Using 1995 Land Use data, supplied by SANDAG, we have calculated that approximately 52 percent of all census tracts in San Diego County have less than 10 percent of their land zoned for commercial, office, retail or industrial usage. Many of the low-income tracts may have low numbers and dollars of small business-loans, in a very practical sense because of the limited amount of space available for business purposes and the other characteristics of the census tract.

In addition, there are a number of other factors, which may influence the rate of lending to low- and moderate-income tracts. These include, but are not limited to:

1. The composition of the businesses within the tracts, considering both the size of the business and the specific type of business classifications. Certainly a retail business with 11 to 50 employees will have different banking needs compared to a manufacturing business with 11 to 50 employees.
2. Past research has suggested that there is a tendency for firms to cluster in major employment centers and the preference for business owners to locate their businesses close to their residence.

Exhibit V-5A

Exhibit 5B

3. The increased utilization of credit scoring which may not allow for the character and cash flow lending decisions.

These factors should be researched in greater detail in order to fully understand the lending patterns and loan distribution dynamics in San Diego County.

Ethnic Considerations

- While it is not known which ethnic groups are applying for and receiving loans from financial institutions, it is known that low-income tracts are dominated by Hispanic and Black populations and that these tracts receive a lower number and dollars of Small Business - Loans, as shown in the following table.

Table V - 8 Percent 1997 and 1998 Lending by Income and Population Characteristics Loan Dollars in Thousands (\$000)						
	Low Income	Moderate Income	Middle Income	High Income	Not Reported	Grand Total
Number of Tracts	5.84%	21.57%	43.37%	26.29%	2.92%	100.00%
1997 Total Loans	3.26%	20.09%	42.96%	33.49%	0.20%	100.00%
1997 Total Loan Dollars	4.21%	20.94%	38.79%	35.80%	0.26%	100.00%
1998 Total Loans	2.95%	20.81%	43.86%	32.22%	0.16%	100.00%
1998 Total Loan Dollars	3.32%	21.29%	40.62%	34.53%	0.23%	100.00%
1998 Average Percent Black	15.47	8.68	5.10	1.59	15.32	5.68
1998 Average Percent Hispanic	57.36	38.96	20.11	10.43	9.61	23.75
1998 Average Percent Asian	9.00	8.36	8.47	6.34	4.27	7.86
1998 Average Percent White	18.16	44.00	66.32	81.64	70.81	62.70

SMALL BUSINESS LENDING - DEMAND

Understanding the distribution of small business-loans by census tract, throughout the County, requires an in-depth understanding of the relationship between the business composition of a census tract and the total loan volume as measured by loan dollars or numbers of loans. To aid in this understanding of why some census tracts have high concentrations of small business-loans (dependent variable) while others have low, the study analyzed the business and demographic characteristics (independent variables) of the census tracts, utilizing correlation and regression analysis.

Data were provided by SANDAG regarding the 1995 Business Census along with 1998 population estimates. These data were integrated with the loan data by census tract and analyzed using SPSS (Statistical Package) and GIS (Geographic Information Systems) software. Thirty-six business variables based on the 1995 business census and 21 demographic variables based on the 1998 SANDAG current year estimates were included in the analysis. A complete listing of the variables used is included in the Appendix B. In addition, several new variables were created through GIS techniques including the measure of the number of bank branches which can serve a census tract and the percent of land zones for business purposes, by census tract. Causal judgements generated through the modeling process have been made cautiously and are based on a broader base of knowledge and understanding of the lending process and the composition of the census tracts.

Because small financial institutions are not required to track loans based on business revenue and because only 37.9 percent of the total FFIEC “small business-loans” were made to small businesses this analysis will focus on the total small business-loans (loans of \$1 million or less) by census tract and those factors that are most highly correlated to the loan volume of the tract.

Preliminary correlation analysis showed most of the business characteristics of a census tract to be highly correlated with the 1998 total small business-loan dollars, by tract. We would expect that the more businesses you have in a census tract, the more loans you would have – these two variables would be expected to move together. Similarly, other variables which are characteristic of the business in the tract would also move up or down with the number of businesses in the tract. Appendix B provides a complete listing of the correlation tables many of these variables proved to be multi collinear and therefore would not be used together to build a predictive model. Interestingly, the population characteristics and several other factors, which we thought would be highly correlated and useful in

predicting small business lending, were not. These included variables such as – percent minority population, number of bank's within a specific service area, percent of land zoned for business purposes and median family income just to mention a few. The following table summarizes some of these variable and their correlation to the total small business-loan dollars.

Correlations								
	TOTDLLR9	PCTHISP9	PCTBLK98	PCTASI98	HS98	BK3MI98	PCTBUS	MEDFAM_9
TOTDLLR9 Pearson Correlation								
Sig. (2-tailed)								
N								
PCTHISP9 Pearson Correlation	-.054							
Sig. (2-tailed)	.259							
N	437							
PCTBLK98 Pearson Correlation	-.083	.231**						
Sig. (2-tailed)	.082	.000						
N	437	437						
PCTASI98 Pearson Correlation	.048	.065	.273**					
Sig. (2-tailed)	.321	.177	.000					
N	437	437	437					
HS98 Pearson Correlation	.175**	-.115*	-.058	.143**				
Sig. (2-tailed)	.000	.016	.229	.003				
N	437	437	437	437				
BK3MI98 Pearson Correlation	.128**	-.027	.117*	-.012	-.005			
Sig. (2-tailed)	.007	.579	.015	.805	.914			
N	445	437	437	437	437			
PCTBUS Pearson Correlation	.386**	.271**	-.036	-.106*	.057	.046		
Sig. (2-tailed)	.000	.000	.449	.027	.231	.335		
N	445	437	437	437	437	445		
MEDFAM_9 Pearson Correlation	.085	-.566**	-.422**	-.106*	.066	-.087	-.195**	
Sig. (2-tailed)	.074	.000	.000	.027	.168	.066	.000	
N	445	437	437	437	437	445	445	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The following table summarizes these blocks of highly intercorrelated variables. If one were to use these intercorrelated variables two things would happen: first, the second variable explains essentially the same variation as the first since there is considerable overlap, and second, with more overlap there is more ambiguity in our causal interpretations of their supposed effects.

		Correlations															
		TOTDLLR9	E_WS95	E_SEDW95	S5_95	S3_95	E2_95	E3_95	E5_95	S_N1_95	S_N2_95	S_N3_95	S_N4_95	E_N1_95	E_N2_95	E_N3_95	E_N4_95
TOTDLLR9	Pearson Correlation																
	Sig. (2-tailed)																
	N																
E_WS95	Pearson Correlation	.838**															
	Sig. (2-tailed)	.000															
	N	437															
E_SEDW95	Pearson Correlation	.881**	.895**														
	Sig. (2-tailed)	.000	.000														
	N	437	437														
S5_95	Pearson Correlation	.895**	.796**	.860**													
	Sig. (2-tailed)	.000	.000	.000													
	N	437	437	437													
S3_95	Pearson Correlation	.912**	.822**	.879**	.958**												
	Sig. (2-tailed)	.000	.000	.000	.000												
	N	437	437	437	437												
E2_95	Pearson Correlation	.838**	.700**	.798**	.870**	.920**											
	Sig. (2-tailed)	.000	.000	.000	.000	.000											
	N	437	437	437	437	437											
E3_95	Pearson Correlation	.813**	.790**	.740**	.795**	.836**	.713**										
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000										
	N	437	437	437	437	437	437										
E5_95	Pearson Correlation	.910**	.772**	.820**	.974**	.957**	.877**	.824**									
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000									
	N	437	437	437	437	437	437	437									
S_N1_95	Pearson Correlation	.832**	.875**	.975**	.815**	.827**	.727**	.672**	.757**								
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000								
	N	437	437	437	437	437	437	437	437								
S_N2_95	Pearson Correlation	.902**	.928**	.972**	.896**	.923**	.825**	.797**	.868**	.947**							
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000							
	N	437	437	437	437	437	437	437	437	437							
S_N3_95	Pearson Correlation	.882**	.920**	.916**	.824**	.863**	.747**	.818**	.827**	.882**	.946**						
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000						
	N	437	437	437	437	437	437	437	437	437	437						
S_N4_95	Pearson Correlation	.851**	.929**	.875**	.819**	.850**	.735**	.825**	.816**	.834**	.928**	.925**					
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000					
	N	437	437	437	437	437	437	437	437	437	437	437					
E_N1_95	Pearson Correlation	.863**	.891**	.985**	.850**	.862**	.765**	.712**	.800**	.996**	.966**	.903**	.862**				
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000				
	N	437	437	437	437	437	437	437	437	437	437	437	437				
E_N2_95	Pearson Correlation	.911**	.930**	.968**	.898**	.926**	.825**	.804**	.874**	.938**	.998**	.950**	.934**	.959**			
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000			
	N	437	437	437	437	437	437	437	437	437	437	437	437	437			
E_N3_95	Pearson Correlation	.883**	.916**	.911**	.820**	.861**	.745**	.821**	.826**	.877**	.942**	.999**	.922**	.898**	.946**		
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		
	N	437	437	437	437	437	437	437	437	437	437	437	437	437	437		
E_N4_95	Pearson Correlation	.832**	.929**	.857**	.802**	.832**	.712**	.818**	.798**	.818**	.913**	.912**	.993**	.844**	.919**	.909**	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437	

** . Correlation is significant at the 0.01 level (2-tailed).

For predicting the volume of loan dollars, the study decided to look at the simplest form of prediction relating characteristics of the tract to the volume of loan dollars in the tract. Since many of the business attributes are attempting to explain the variation in loan dollars the study to choose a variable which will be consistent with other research in San Diego regarding the growth of our region. One such variable, noted in the San Diego Economic Opportunities Overview, October 13, 1995, is the notion of size of companies in business clusters. We found those tracts with businesses that employed between 11 and 50 employees to be the best choice for measuring change in the volume of loan dollars. This variable also ties in to the picture of the new economy: San Diego's Driving Cluster Industries.

Using simple linear regression analysis, we can explain **81 percent** of the variance between the total small business-loan dollars by tract, by examining the number of companies that employ between 11 and 50 employees within a census tract. The model summary statistics are summarized in the following table. The R Square represents the amount of variance explained by the independent variable – Number

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.902 ^a	.814	.814	3576.66

a. Predictors: (Constant), S_N2_95

of companies employing between 11 and 50 employees.

The linear regression supplies a predictive formula based on the correlation coefficients and the constant. The model coefficient table is summarized below.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-212.934	191.714		-1.111	.267
	S_N2_95	140.812	3.227	.902	43.640	.000

a. Dependent Variable: TOTDLLR98

The resulting formula allows us to predict the small business-loan dollars based on a constant plus the coefficient times the variable – which looks like this:

$$\text{Total Loan \$} = \$140.812 \times (\# \text{ of Co. with 11-50 employees}) - \$212.934$$

The loan dollar prediction results are summarized in the following table.

Table V - 9 Actual 1998 Loan Dollars vs Predicted Loan Dollars by Income Classification of Tracts Loan Dollars in Thousands (\$000)						
	Low Income	Moderate Income	Middle Income	High Income	Not Reported	Grand Total
Number of tracts	26	96	193	117	13	445
1998 Total Loan Dollars	\$51,749	\$331,322	\$632,229	\$537,493	\$3,623	\$1,556,416
Predicted Loan Dollars	\$68,671	\$414,244	\$704,079	\$367,247	\$2,174	\$1,556,416
Difference	-\$16,922	-\$82,922	-\$71,850	\$170,246	\$1,449	\$0

The following map Exhibit V-6, shows the residual or difference by census tract. This map helps to visualize the areas that have more potential for loans based on the predictive model. Areas highlighted in red, green and blue represent areas that are under-loaned.

- Proactive efforts to market more loans to low- and moderate-income defined areas could result in as much as \$90 million per year increase in small business-loan commitments into these areas.

Based on the regression analysis, we can also further analyze the effectiveness of current lending efforts into low- and moderate-income census tracts. Based on the model, tracts that have similar numbers of companies employing between 11 and 50 employees should have similar loan volumes as high-income defined tracts. Data presented in Volume II Addendum support earlier findings that suggest there is a disparate lending pattern in low-income defined tracts versus high-income defined tracts.

Table V-9A is a sample of tracts that have the same number of companies and the distribution of small business-loans among low-, moderate-, middle- and high-income defined tracts.

Additional data are presented in Volume II Addendum supports earlier findings that suggest there is a disparate lending pattern in low-income defined tracts versus high-income defined tracts.

Table V-9A

Exhibit V-6

REGRESSION